

**Cardoso, Rebecca D CIV USN COMNAVFACENGCOM DC (USA)**

---

**From:** Bacey, Juanita@DTSC <Juanita.Bacey@dtsc.ca.gov>  
**Sent:** Wednesday, June 6, 2018 3:09 PM  
**To:** Clark, David J CIV  
**Cc:** Cardoso, Rebecca D CIV NAVFAC HQ, BRAC PMO; Kaiser, Katrina@Waterboards; Zech, Myriam@Waterboards; Walsh, Kimberly@DTSC; Pettijohn, Julie@DTSC; Bob.Beck@sfgov.org; Chris Glenn (cglenn@Langan.com) (cglenn@Langan.com); dale smith  
**Subject:** [Non-DoD Source] NSTI - Site 12 Draft RA/NTCRA Work Plan  
**Attachments:** HERO Dust Action Levels Parcel E 2017-05-15.pdf

Hi David,

DTSC has reviewed the above draft Site 12 Work Plan. We have the following comments.

#### Comments on Work Plan

##### General Comments

1. The draft Work Plan uses the non-SWDA ROD cleanup goals for both the non-SWDA cleanup and the North Point SWDA NTCRA. DTSC accepts the application of the non-SWDA cleanup goals to the North Point SWDA NTCRA. However, please note that the cleanup goals in the non-SWDA ROD are based on regulatory agency guidance or site screening concentrations that are no longer current. The current screening level for total PCBs in a residential scenario is 0.23 mg/kg. See also SAP General Comment #3 below. For the forthcoming SWDA feasibility study, current screening levels should be used as cleanup goals in the SWDA areas. The most current human health screening levels are found at <http://www.dtsc.ca.gov/AssessingRisk/humanrisk2.cfm>  
<<https://na01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.dtsc.ca.gov%2FAssessingRisk%2Fhumanrisk2.cfm&data=02%7C01%7C%7C6b2344d56eeb4f6586fe08d5cafde8dd%7C3f4ffbf4c7604c2abab8c63ef4bd2439%7C0%7C0%7C636638114227413865&sdata=A0HKwoJKh8knfAFTdjEWenHZ2XcNHR4vjPGESfJ1M8E%3D&reserved=0>> and <https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables>  
<<https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.epa.gov%2Frisk%2Fregional-screening-levels-rsls-generic-tables&data=02%7C01%7C%7C6b2344d56eeb4f6586fe08d5cafde8dd%7C3f4ffbf4c7604c2abab8c63ef4bd2439%7C0%7C0%7C636638114227423869&sdata=7WJG6N8mo5OLVISjqS2EaMDB8WMw%2F6reXuNhPytdfWQ%3D&reserved=0>> .

2. The Environmental Protection Plan indicates it will comply with various regulatory agency requirements. However, it does not include the California Air Resources Board requirements. Ambient air quality standards for PM10 must be included (<https://www.arb.ca.gov/research/aaqs/pm/pm.htm>). See also Appendix F Specific Comment #3 below.

##### Specific Comments:

1. Section 1.2 – Schedule – Please correct the dates.
2. Section 5.6 - Site Security – Please update if buildings have been vacated.

3. Section 5.13.2.1 – Dust Control and Air Monitoring Reporting – Please add to this Section that dust action levels will be used as a criteria to take action when necessary. Due to the close proximity to residential housing, residential PM10 action levels as well as COCs in dust action levels should be developed. OSHA worker safety levels are not appropriate. See General Comment #2 above.
4. Section 5.13.2.2 Petroleum Odors – Indicates that “in the event that FID monitoring results suggest the need for additional control measures....”, How will the FID results suggest this? What is the criteria use to make this determination? This Section must be revised and clarified.
5. Section 6.1 IR Site 12 Non-SWDA Remedial Action – Indicates that “radiological screening and waste characterization of excavated soil at the RSY will occur as needed to support excavation activities.” Please clarify what you mean by “as needed”. Does this refer to waste characterization? Won’t all excavated soil be radiologically screened?
6. Section 6.1.3 Pre-Excavation Soil Boring – Indicates that pre-excavation soil borings may be used as confirmation samples. Under what conditions would these boring samples be used as confirmation samples? Please clarify.
7. Section 6.1.7 Saturated Soil – Paragraph 1 indicates that confirmation samples will be collected. DTSC agrees that confirmation samples should be collected, however, this Section goes on to state that pre-excavation soil borings (also referred to as core boring, soil core samples) may be used in lieu of a bottom excavation confirmation samples. Please clarify under what conditions this would be done. This contradicts with Section 6.1.5, paragraph 3. Please review and clarify.
8. Section 6.2.1 – Soil Excavation – Paragraph 2 – Please include the justification as to why excavation of impacted soil is limited to 4 feet bgs if visible debris is no longer observed.
9. Section 6.2.2 – Saturated Soil – Paragraph 1 – Indicates that surface waters may be reused as on-site dust mitigation and that use of such will require approval by RASO prior to reuse. This contradicts with statements in the SAP that surface waters will not be sampled for radionuclides. Please clarify.
10. Section 6.2.2 – Saturated Soil – Paragraph 1 – Surface waters, including ponding within excavation areas, must be sampled for all COCs and approved by regulatory agencies for reuse prior to using for dust control or other uses. Please revise this section.
11. Section 6.2.3 – Confirmation Sampling and Analysis – Suggest deleting the following sentence from paragraph two because it repeats what was stated at the beginning of the paragraph: Following satisfactory results from lead, the sample will b analyzed for PCBs and PAHs.
12. Section 6.2.3 – Confirmation Sampling and Analysis – Please include a justification for analyzing only 25% of the samples for dioxins/furans.
13. Section 8.0 – Remedial Action Completion Report – Please clarify in this section how the completion of the North Point SWDA action will be documented.

## Appendix A – SAP:

### General Comments

1. The approach to the soil cleanup is unclear for TPHs. TPHs are sometimes listed as COCs for soil (in text) and sometimes not (in table footnotes). TPH cleanup does seem to be an objective for soil because TPHs are included in the list of remedial goals (WS #10, Table 10-2). However, there is a footnote saying “not a COC. Cleanup goals shown...to

target mass reduction in soil.” The approach to deciding when sufficient TPH mass has been removed is not clear. TPHs are not included in analyte lists (WS #18) for excavation confirmation samples. Please clarify the cleanup approach for TPHs in soil. Specifically clarify decision criteria for completing TPH mass reduction. Also, please clarify the approach to TPH in the Project Objectives in the main work plan.

2. Total chromium, 4,4-DDD, and alpha-BHC are listed as COCs in the text (WP and SAP) but tables note that these chemicals are not COCs. It appears these chemicals are being treated as COCs and will drive additional excavation in certain locations if they exceed remedial goals. Please clarify if the approach to cleanup of these chemicals in soil is the same as the other COCs listed in text and tables. Especially clarify Worksheet #11 on this point.

3. The SAP uses the non-SWDA ROD cleanup goals for both the non-SWDA cleanup and the North Point SWDA NTCRA. DTSC accepts the application of the non-SWDA cleanup goals to the North Point SWDA NTCRA. However, please note that the cleanup goals in the non-SWDA ROD are based on regulatory agency guidance or site screening concentrations (TI SSCs) that are no longer current. For example, the lead cleanup goal in the non-SWDA ROD is 400 mg/kg and the current DTSC residential screening level is 80 mg/kg. The slope factors and potency factors for PAHs have also been updated. For the forthcoming SWDA feasibility study, please update the cleanup goals to consider the most current screening levels. The most current human health screening levels are found at <http://www.dtsc.ca.gov/AssessingRisk/humanrisk2.cfm> <<https://na01.safelinks.protection.outlook.com/?url=http%3A%2F%2Fwww.dtsc.ca.gov%2FAssessingRisk%2Fhumanrisk2.cfm&data=02%7C01%7C%7C6b2344d56eeb4f6586fe08d5cafde8dd%7C3f4ffbf4c7604c2abab8c63ef4bd2439%7C0%7C0%7C636638114227413865&sdata=A0HKwoJKh8knfAFTdjEWenHZ2XcNHR4vjPGESfJ1M8E%3D&reserved=0>> and <https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables> <<https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.epa.gov%2Frisk%2Fregional-screening-levels-rsls-generic-tables&data=02%7C01%7C%7C6b2344d56eeb4f6586fe08d5cafde8dd%7C3f4ffbf4c7604c2abab8c63ef4bd2439%7C0%7C0%7C636638114227423869&sdata=7WJG6N8mo5OLVlSjqS2EaMDB8WMw%2F6reXuNhPytdfWQ%3D&reserved=0>>. These current screening levels should also be considered in establishing project quantitation limits.

#### Specific Comments:

1. Worksheet #5 – Project Organizational Chart, doesn’t include Jerry Cooper, Gilbane’s Corporate RSO/CHP. Please add Mr. Cooper since he reviews the radiological data to ensure that the DQOs have been met. He is also tasked with providing critical analysis and interpretation of radiological data.
2. Worksheet #10, Section 10.3 and Table 10-1 are missing information and contain irrelevant information. Table 10-1 doesn’t include a summary of the previously started NTCRA that is mentioned in Worksheet #9 Action Items. Table 10-1 also doesn’t include a summary of the FS Addendum that superseded the FS. Section 10.3 doesn’t discuss the history of investigations and/or removals at North Point SWDA. Please remove the irrelevant information and add the missing information.
3. Worksheet #10, Section 10.4 – Nature and Extent of Contamination, doesn’t describe the nature and extent except with a reference to Table 17-1. Instead it lists expected dimensions of the planned excavations. It also states “continuation of the excavation of the North Point SWDA NTCRA” but doesn’t explain what has been done up to this point or what is driving continued work. Please expand Section 10.4 to include a brief narrative of the nature and extent of contamination.
4. Worksheet #10, Table 10-3 states that there are no release criteria and/or screening levels for water containing Ra-226. Please revise the document to clarify the approach to disposing of (1) investigation-derived waste water that will be generated during groundwater sampling, and (2) waste water generated during excavation and equipment decontamination. Please include the rationale for the approach.
5. Worksheet #11 includes the goal of monitoring for Ra-226 in groundwater but there is no corresponding study question, remediation goal, screening level, or decision rule. Please clarify the purpose of the Ra-226 data for groundwater and clarify the decision rules for those data.
6. Worksheet #11 also includes a decision rule for groundwater that refers to “TPH concentrations declining and geochemical parameters are adequate for MNA”. Please explain the approach to trend analysis and geochemical data

interpretation that will be employed. Please specifically apply the concepts discussed in the USEPA guidance for MNA  
[https://www.epa.gov/sites/production/files/2014-03/documents/tum\\_ch9.pdf](https://www.epa.gov/sites/production/files/2014-03/documents/tum_ch9.pdf)  
<[https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.epa.gov%2Fsites%2Fproduction%2Ffiles%2F2014-03%2Fdocuments%2Ftum\\_ch9.pdf&data=02%7C01%7C%7C6b2344d56eeb4f6586fe08d5cafde8dd%7C3f4ffbf4c7604c2abab8c63ef4bd2439%7C0%7C636638114227433882&sdata=Zh3KiFdZ%2FmGSnpma6zH6BdEpEdQgHJiDcFmhkJdpz4%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.epa.gov%2Fsites%2Fproduction%2Ffiles%2F2014-03%2Fdocuments%2Ftum_ch9.pdf&data=02%7C01%7C%7C6b2344d56eeb4f6586fe08d5cafde8dd%7C3f4ffbf4c7604c2abab8c63ef4bd2439%7C0%7C636638114227433882&sdata=Zh3KiFdZ%2FmGSnpma6zH6BdEpEdQgHJiDcFmhkJdpz4%3D&reserved=0)>. Please expand the list of information inputs as needed to clarify the approach.

7. Worksheet #14, Section 14.1, mentions annual groundwater sampling but the work plan states that groundwater sampling will be done quarterly. Please clarify the groundwater monitoring frequency. Section 14.1.1 steps one and two should be reversed to prevent potential contamination of decontaminated sampling equipment. Please revise the document accordingly.

8. Worksheet #15.1 lists a project quantitation limit for PAHs as BAP EQ, but this is a calculated value and as such there is no quantitation limit. Please correct the table.

9. Worksheets #15.6 through #15.14 – please refer to:  
[https://www.dtsc.ca.gov/Schools/upload/SMP\\_FS\\_Cleanfill-Schools.pdf](https://www.dtsc.ca.gov/Schools/upload/SMP_FS_Cleanfill-Schools.pdf)  
<[https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.dtsc.ca.gov%2Fschools%2Fupload%2FSMP\\_FS\\_Cleanfill-Schools.pdf&data=02%7C01%7C%7Ce84160b716724a1251e908d5ca7fa849%7C3f4ffbf4c7604c2abab8c63ef4bd2439%7C0%7C636637571977008801&sdata=lKMgMKjGIJKn4nzSogfuYAU50dU9IP18Y4%2FdAzAobfQ%3D&reserved=0](https://na01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fwww.dtsc.ca.gov%2Fschools%2Fupload%2FSMP_FS_Cleanfill-Schools.pdf&data=02%7C01%7C%7Ce84160b716724a1251e908d5ca7fa849%7C3f4ffbf4c7604c2abab8c63ef4bd2439%7C0%7C636637571977008801&sdata=lKMgMKjGIJKn4nzSogfuYAU50dU9IP18Y4%2FdAzAobfQ%3D&reserved=0)> to establish the approach for characterizing import fill. For example, WS #15.7 lists no project screening limits for m,p-xylenes and o-xylene but USEPA RSLs are available for these chemicals. The table also lists the out-of-date June 2017 RSL table as a reference for import fill screening limits. Further, DTSC uses more stringent screening values for certain compounds (DTSC HERO HHRA Note 3). Please update the Worksheet #15 tables with the most current version of DTSC HERO HHRA Note 3 and the RSLs as applicable. The TI SSCs established in 2005 for certain compounds are not applicable for import fill characterization. For example, the TI SSC for bromoform is listed as 62 mg/kg but the current USEPA RSL for residential soil is significantly lower at 19 mg/kg and the DTSC HERO HHRA Note 3 lists 20 mg/kg for residential soil. Please use the current screening levels giving priority to DTSC HERO HHRA Note 3 values.

10. Worksheet #18 – Please clarify whether soil samples listed will be discrete or composite samples.

## Appendix B – Waste Management Plan

1. Section 5.5 – Waste Inspection and Documentation Program – Indicates that formal inspections of accumulation areas will be conducted and recorded weekly. Please included that these inspection will also address any areas of concern at the time they are found.

## Specific Comments on Appendix F – Environmental Protection Plan

1. Attachment 1 Storm Water Plan

- a. Figures 2 does not show BMPs and Figure 3 is referenced in Section 2.6 but not included. Please correct/include.
- b. Section 2.1.6 Project Description – Paragraph 1 does not include hot spot removals. Please add.
- c. Section 2.1.6 Project Description – Paragraph 7 – Refers to Building 224 slab as a slab and as a foundation. Please revise for consistency.
- d. Section 2.1.6 Project Description – Paragraph 10 – Does not include a bullet for hot spot excavations. Please add.

- e. Appendix A Construction Schedule – Schedule needs to be updated.
- 2. Attachment 2 - Dust Control Plan –The Plan should also indicate at what point mitigation measures will be enacted when exceedances of the action level occurs. ARB guidelines recommend, “If the action level is exceeded for a period greater than 30 minutes, work operations will cease until adequate dust mitigation measures can be implemented.” See General Comment #2 above.
- 3. Attachment 3 - Air Monitoring Plan –
  - a. The Action levels provided in Section 3.1 and Table 1 are not appropriate for residential areas. Cal Osha worker safety actions levels are not acceptable as action levels for the community. The PM10 standard is 50 ug/m<sup>3</sup> over a 24-hour TWA as indicated by the California Air Resources Board must be used. See the attached Memorandum from the DTSC toxicologist for an example on the development of dust action levels for contaminates in soil.
  - b. Additionally, in regards to real-time dust monitoring as indicated in Section 3.14, two air monitoring stations may be appropriate for the small 10 ft x 10 ft excavations, but not the larger SWDA excavation. A minimum of two real-time aerosol monitors or RAMs will be required.
  - c. Section 3.1.4 indicates the RAMs will be checked “frequently”. Please specify the time frequency that they will be checked.
  - d. Section 3.1.5 – Because COC sources are not contained to one specific area, reduction of monitoring for various COCs and/or dust is not acceptable.
  - e. Air monitoring data shall be submitted to regulatory agencies during fieldwork activities upon request.

If you have any questions, please feel free to contact me.

In addition, CDPH – EMB has reviewed the document and has prepared a draft memorandum. However, their management is unable to review the document at this time. We are requesting an extension until June 18th to provide their comments. Thank you.

---

Nina Bacey, Project Manager

Sr. Environmental Scientist

Brownfields & Environmental Restoration

CalEPA – CA Dept. of Toxic Substances Control

700 Heinz Ave, Berkeley, CA 94710

(510) 540 - 2480

